

महाराष्ट्र विद्युत नियामक आयोग

Maharashtra Electricity Regulatory Commission



Ref. No. MERC/FAC/2020-21/ SBR / 17

Date: 11 October, 2021

To,

Mindspace Business Parks Private Limited, Plot No- C-30, Block 'G',

Opposite SIDBI,

Bandra Kurla Complex,

Bandra (E), Mumbai - 400 051

Subject:

Post Facto approval of Fuel Adjustment Charges (FAC) submissions of MBPPL

for the months of April 2021, May 2021 and June 2021.

Reference:

1. MBPPL's FAC submission for the months of April 2021, May 2021 and June

2021 vide email dated 24 August, 2021.

Sir,

Upon vetting the FAC calculations for the months of April to June, 2021 as mentioned in the above reference, the Commission has accorded approval for charging FAC to its consumers as shown in the table below:

Month	April 2021	May 2021	June 2021
Z _{FAC} allowed for recovery (Rs. Crore)	0.33	0.32	0.31

The Commission allows the carry forward FAC of Rs. 0.015 Crore for the month of April 2021, Rs. 0.669 Crore for the month of May 2021 and Rs. 1.043 Crore for the month of June 2021. Accordingly, the Commission allows the recovery of Rs. 1.043 Crore as carried forward FAC to be recovered in future period. This is on account of 20% limit set under the MYT Regulation, 2019 and reasons as mentioned in this vetting report.

Yours faithfully,

(Dr. Rajendra G. Ambekar) Executive Director, MERC

Encl: Annexure A: Detailed Vetting Report for the period of April to June, 2021.

Page 1 of 19

ANNEXURE

Detailed Vetting Report
Date: 11 October, 2021

POST FACTO APPROVAL FOR FAC CHARGES FOR THE MONTHS OF APRIL 2021, MAY 2021 AND JUNE 2021.

Subject: Post facto approval of Fuel Adjustment Charges (FAC) submissions of MBPPL

for the months of April 2021, May 2021 and June 2021

Reference: 1. MBPPL's FAC submission for the months of April 2021, May 2021 and June

2021 vide email dated 24 August, 2021.

1. FAC submission by MBPPL Undertaking:

1.1. MBPPL has made FAC submissions for the months of April 2021, May 2021 and June 2021 as referred above. Upon vetting the FAC calculations, taking cognizance of all the submissions furnished by MBPPL, the Commission has accorded post facto approval for the FAC amount to be charged in the billing months of June 2021, July 2021 and August 2021.

2. Background

- 2.1. On 30 March, 2020 the Commission has issued Tariff Order in respect of MBPPL, (Case No. 328 of 2019) for approval of Aggregate Revenue Requirement and Multi Year Tariff for the Control Period from FY 2020-21 to FY 2024-25. Revised Tariff has been made applicable from 1 April, 2020
- 2.2. Vide its letter dated 20 April, 2020, the Commission communicated the excel formats and guiding principles for filing of FAC submissions to all Distribution Licensees including SEZs. The Commission also directed all Distribution Licensees to submit FAC computations, including details pertaining to variation in fuel cost of generators for the approval of the Commission.
- 2.3. Vide FAC Vetting Report dated 31 May, 2020 the Commission accorded prior approval to the FAC for the month of April, 2020. Further, vide FAC Vetting Report dated 9 October, 2020 the Commission accorded Post-facto approval to the FAC for the month of May and June, 2020. Vide FAC vetting Report dated 8 December, 2020 the Commission accorded Post-facto approval to the FAC for the months of July 2020, August 2020 and September 2020. Vide FAC vetting Report dated 25 March, 2021 the Commission accorded Post-facto



- approval to the FAC for the months of October 2020, November 2020 and December 2020. Further, vide FAC Vetting Report dated 18 May, 2021 the Commission accorded Postfacto approval to the FAC for the month of January to March, 2021.
- 2.4. As per provisions of MYT Regulations, 2019 a Distribution Licensee (SEZ) is required to obtain post-facto approval of the Commission on a quarterly basis for FAC charges within 60 days of close of each quarter. Accordingly, vide its letter dated 24 August, 2021 MBPPL has filed FAC submissions for the months of April 2021, May 2021 and June 2021 for post-facto approval. The Commission has scrutinized the submissions provided by MBPPL and has also verified the fuel and power purchase bills provided along with its submissions.

3. Energy Sales of the Licence

Total

- 3.1. In the MYT Order passed by the Commission in Case No. 328 of 2019, the Commission has approved revised Tariffs so as to maintain zero cross subsidy across tariff categories.
- 3.2. The net energy sales within Licence area as submitted by MBPPL in the FAC submission and as approved by the Commission are as shown in the Table 1 below:

Table 1. Diet 6, Said approved and Metalli M. 1905									
Consumer Category	Approved by the Commission (MU)	Monthly Approved (MU)	Actual Sales (MU)						
	(I)	(II=I/12)	Apr-21 May-21		Jun-21				
HT Category									
HT- I Industrial	74.04	6.17	3.02	2.87	2.72				
HT-II Commercial	-	-	-	-	-				
LT Category					×				
LT-II(A) Commercial (0-20 kW)	0.78	0.07	0.01	0.01	0.01				
LT-II (B) Commercial (above 20 kW)	0.37	0.03	0.02	0.02	0.01				
LT-III (A) Industrial (0-20 kW)	0.01	0.00	0.04	0.04	0.04				
LT-III (B) Industrial (above 20 kW)	7.86	0.66	0.49	0.48	0.44				

Table 1: Energy Sales approved and Actual in MUs

3.3. It can be observed from the above Table 1 that the actual sales during the months of April, May and June 2021 are 3.57 MUs, 3.42 MUs and 3.23 MUs respectively, which is 48.39%, 50.63% and 53.35% less than the monthly approved energy sales of 6.92 MUs by the Commission for the FY 2021-22. The major variation was observed in the HT-I Industrial,

6.92

3.57

3.42

83.06

3.23

LT-II Commercial and LT-III (B) Industrial categories, which is due to the continuation of impact of Covid-19.

4. Power Purchase Details

- 4.1. MBPPL is a deemed Distribution Licensee notified by the Commission for IT& ITES SEZ located at Airoli, Thane. MBPPL does not own or operate any generating stations. Accordingly, MBPPL is required to procure power from outside sources in order to fulfil the demand of its consumers.
- 4.2. **Power Purchase Agreement:** MBPPL purchases power from (i) M/s. Jindal Power Limited (JPL) as per Medium-Term PPA for 10 MW for meeting the Base Load demand of 10 MW; and (ii) M/s. GMR Energy Trading Limited (GMRETL) to meet the Peak load demand (weekdays and 8.00 AM to 11 PM) for a period of 5 years from 1 July 2016 to 30 June 2021. The Commission has approved both PPAs and adopted the lowest tariff as a result of the process of competitive bidding followed by MBPPL.
- 4.3. The Commission in its MYT Order dated 30 March, 2020 in Case No. 328 of 2019 has approved power purchase from M/s. Jindal Power Limited (JPL) for meeting the Base Load demand for 10 MW and with M/s. GMR Energy Trading Limited (GMRETL) to meet the Peak load demand from 1 July 2016 to 30 June 2021. The Commission has approved purchase of Solar REC and Non- Solar REC for FY 2021-22 since the Commission is aware of the fact that even if MBPPL initiates the purchase of renewable power, it will take at-least 18 to 24 months for the availability of power due to time required to complete the entire process involving Bidding Process and commissioning timelines required as per Standard Bidding Guidelines for procurement of Wind and Solar power.

4.4. Summary of power purchase of MBPPL is as under-

Sr. No.	Particular	Compliance					
1	Purchase from Approved Sources	Yes. MBPPL has procured power (Base Load) from approved source i.e. M/s. Jindal Power Limited and (Peak Load) from approved source i.e.M/s. GMRETL.					
2	Merit Order Dispatch	YES. MBPPL has scheduled base power requirement from Jindal Power Limited, in line with MOD principles. It is submitted that peak power from GMRETL was sold through third party sale mechanism and was not utilized for own consumption of MBPPL.					
3	Fuel Utilization Plan	Not applicable. All the sources of power procurement fall under Section 63 of EA, 2003.					
4	Pool Imbalance	MBPPL has injected 0.03 MU , 0.09 MU and 0.05 MU to the imbalance pool for the month of April 2021 to June 2021 respectively, by higher					



Sr.	Particular	Compliance								
No.		1 1 1			(25) December 2011					
	G 1 C	cheduling of power. MBPPL has scheduled the total power requirement from Jindal Power								
5	Sale of Surplus Power	MBPPL has scheduled the Limited (Base Contract) a sold 3.36 MU, 1.73 MU April 2021, May 2021 available from JPL was so GMRETL was sold on IEX	and peak pow and 2.34 MU and June 20 old to GEPL a	er from GMRETL. Surplus power for 121 respectively.	MBPPL has the month of Surplus power					
6	Power	Actual Power Purchase is	3.80 MU, 3	.70 MU and 3.46	MU in April,					
	Purchase	May and June, 2021 resp lower sales.	ectively, as a	gainst approved 7.2	22 MU due to					
7	7 Source wise Power Purchase	Source Name	Approved (MU)	Actual – April 2021 (MU)	Proportion in actual Purchase (%)					
		JPL	12	5.24	137.83					
		GMRETL	n ë	1.92	50.61					
		Sale of Surplus Power	=	(3.36)	(88.44)					
		Medium Term PPA - Base Load - Bilateral	6.17	-0	According to					
		Short Term PPA - Peak Load	1.05	8	*					
		Total	7.22	3.80	100.00					
		Source Name	Approved (MU)	Actual – May 2021 (MU)	Proportion in actual Purchase (%)					
		JPL		3.75	101.36					
		GMRETL	-	0.86	23.12					
		Sale of Surplus Power	-	(1.73)	(46.74)					
		Medium Term PPA - Base Load - Bilateral	6.17	3	=					
		Short Term PPA - Peak Load	1.05	-	-					
		Solar and Non-Solar Purchase	7=	0.82						
		Total	7.22	3.42	100.00					
	SHARLECTRICITY RECEIPT	Source Name	Approved (MU)	Actual – June 2021 (MU)	Proportion in actual Purchase					

Sr. No.	Particular	Compliance					
					(%)		
		JPL	-	3.68	106.46		
25		GMRETL	-	1.33	38.53		
		Sale of Surplus Power	-	(2.34)	(67.75)		
		Medium Term PPA - Base Load - Bilateral	6.17				
		Short Term PPA - Peak Load	1.05				
		Solar and Non-Solar Purchase	-	0.79	22.76		
		Total	7.22	3.46	100.00		
8	Power Purchase under Section 63 of Electricity Act, 2003	Monthly power purchase i MBPPL. Power Purchase MBPPL with each source and rate are verified from been considered in the FAC	rates are ve of power. M the invoices	erified from the PPA Ionthly power purch	A signed by ase quantum		

5. Power Purchase Cost:

- 5.1. The Commission has scrutinised the detailed bills/invoices submitted for power purchase and sale of surplus power during the month of April to June, 2021, in order to verify the claim of MBPPL regarding Average Power Purchase Cost (APPC). The Commission has verified the actual as well as approved Net Purchase (MUs), Variable Cost (Rs./kWh) and Power Purchase Cost considered in FAC computation from the invoices and applicable MYT Order respectively.
- 5.2. The total Power Purchase Cost incurred in April, May and June, 2021 is Rs. 3.80 Crore, Rs. 3.70 Crore and Rs. 3.46 Crore, respectively which is lower than the monthly approved Power Purchase cost of Rs. 7.22 Crore by the Commission. This is on account of lower procurement of power due to lower sales in MBPPL area.

5.3. Jindal Power Limited:

Power Procurement from JPL: MBPPL procures its base load requirement of power from JPL. The Commission in its Order dated 30 March, 2020 in Case No. 328 of 2019 has not considered JPL in its approved sources for FY 2021-22 as the PPA is going to expire on 30 June, 2021. MBPPL has purchased power from its existing source M/s. Jindal Power Limited (JPL) as the Medium-Term PPA for 10 MW with JPL is till 30 June, 2021. MBPPL has purchased **5.24 MU**, **3.75 MU and 3.68 MU** from JPL during



the month of April 2021, May 2021 and June, 2021 respectively. The Commission has considered quantum and power purchase cost for FY 2021-22 from Medium Term PPA.

- 5.4. Power Purchase cost from GMRETL: MBPPL has purchased 1.92 MU, 0.86 MU and 1.33 MU during the month of April 2021, May 2021and June 2021 respectively. MBPPL has purchased power at Rs. 3.96 / kWh, Rs. 6.02 / kWh and Rs. 4.76 / kWh for the month of April 2021, May 2021and June 2021 respectively. Variable cost for power purchase is Rs. 1.74 / kWh for all three months. The Commission in its Order dated 30 March, 2020 in Case No. 328 of 2019 has not considered GMRETL in its approved sources for FY 2021-22 as the PPA is going to expire on 30 June, 2021. The Commission has considered quantum and power purchase cost for FY 2021-22 from Medium Term PPA.
- 5.5. Medium Term PPA Base Load Bilateral: MBPPL in its Order dated 30 March, 2020 in Case No. 328 of 2019 has proposed to tie up medium term PPA for base load by aggregating power purchase requirement of all the 3 SEZs, viz. MBPPL, GEPL and KRCIPPL. Share of MBPPL in this aggregated power purchase arrangement is submitted as 10 MW for base load on medium term basis. The Commission has approved the overall quantum and power purchase cost from Medium Term PPA. MBPPL for the month of April 2021, May 2021and June 2021 respectively has procured power from existing PPA from JPL and GMRETL as the PPA was till 30 June, 2021.
- 5.6. Short Term PPA Peak Load: MBPPL in its Order dated 30 March, 2020 in Case No. 328 of 2019 has proposed to tie up short term PPA for peak load by aggregating power purchase requirement of all the 3 SEZs, viz. MBPPL, GEPL and KRCIPPL. Share of MBPPL in this aggregated power purchase arrangement is submitted as 6 MW for peak load on short term basis. MBPPL for the month of April 2021, May 2021and June 2021 respectively has procured power from existing PPA from JPL and GMRETL as the PPA was till 30 June, 2021.
- 5.7. Renewable Sources: In order to meet the Renewable Purchase Obligation (RPO) shortfall for FY 2020-21 due to stay on REC trading by APTEL and obligation of FY 2021-22, MBPPL has procured Solar and Non-Solar renewable power in the month of May 2021 and June 2021 from G-TAM Market on IEX platform. MBPPL has purchased 0.82 MU and 0.79 MU for the month of May 2021 and June 2021. The Commission in its Order dated 30 March, 2020 in Case No. 328 of 2019 has considered the availability of renewable energy from Wind and Solar sources from FY 2022-23 and has not considered power purchase quantum from Solar and Non Solar purchase for FY 2021-22. The Commission has only considered variable power purchase cost for Solar REC and Non Solar REC purchase Rs. 1.00/kWh per unit for FY 2021-22.
- 5.8. Sale of Surplus Power: As the Medium-Term PPA with JPL for meeting the Base Load demand and GMRETL to meet the Peak load PPA expired on 30 June, 2021, MBPPL has

procured power from its existing sources. MBPPL has scheduled the total power requirement from Jindal Power Limited (Base Contract) and sold the surplus power to GEPL. Also, surplus power available from GMRETL was sold on IEX. MBPPL has sold surplus power of 3.36 MU, 1.73 MU and 2.34 MU to GEPL and on IEX during the month of April 2021, May 2021 and June 2021, respectively.

5.9. Power Sale from MBPPL to GEPL:

The power from JPL was available at variable cost of **Rs 2.42/kWh**. Due to lower demand, MBPPL was required to pay fixed costs as per terms and conditions of Medium term PPA which unnecessary burdens the consumers of MBPPL with fixed cost. Therefore, to minimise the burden of fixed cost, the surplus power available from JPL was sold to GEPL at **Rs 2.65/unit**. The said sale has been approved by the Commission in its Order dated 23 January, 2021 in Case No 231 of 2020. The relevant extract is as given below:

"9.6 The Commission notes that Variable cost of Rs 2.65/kWh being offered by MBPPL to GEPL is in line with the market trends and is lower than existing contract of GEPL with GMR i.e. Rs. 2.83/kWh. Such savings in the power purchase cost will reduce burden on the consumers of GEPL as well as MBPPL. Therefore, the Commission allows such bilateral contract between MBPPL and GEPL to be continued till June, 2021....."

5.10. Power Sale from GMRETL to IEX

MBPPL has medium term PPA with GMRETL for meeting its peak power requirement. However, due to lower demand, power was not scheduled, and fixed charge was being paid as per terms and conditions of the PPA. The said power from GMRETL is interstate power. The variable cost of said power includes three components i.e. Fuel and Generation Cost (Rs 1.71/kWh), Transmission Charges (POC Injection and Drawl charges- Rs 0.53/kWh) and Transmission Losses (Rs 0.23/kWh). The total variable cost is Rs 2.47/kWh to optimise the power purchase cost, the said power from GMRETL was sold on IEX platform through third party sale mechanism whenever the price on IEX was higher than the Fuel and Generation Cost/POC injection charges as per PPA. The cut-off price for bidding on IEX was Rs 2.07/kWh so that MBPPL is cost neutral and there is no additional burden on consumers. Accordingly, the power was sold on IEX in April, May and June 2021, respectively at Rs 3.38/kWh, Rs. 2.70/kWh and Rs 3.05/kWh respectively thereby benefitting the consumers.

- 5.11. Accordingly, MBPPL has sold power at Rs. 3.07/kWh, Rs. 2.67/kWh and Rs. 2.87/kWh for the month of April 2021, May 2021 and June 2021, respectively.
- 5.12. Imbalance Pool: MBPPL has injected power to the tune of 0.03 MU, 0.09 MU and 0.05 MU to the Pool in the months of April 2021, May 2021 and June 2021, each on account of higher power procurement. The said injection into the pool may be on account of either decrease in demand of consumers than estimated by the licensee or due to higher

Page 8 of 19

generation than scheduled by the generator. In both the scenarios, power incremented in the imbalance pool is not supplied to its consumers.

- 5.13. The present FAC mechanism includes any variation in power purchase cost which includes both Fixed Charges and Variable Charges. The imbalance pool settlement is done considering Variable Charges on monthly basis and Fixed Cost Reconciliation on yearly basis. Accordingly, considering monthly surplus imbalance pool quantum at provisional variable cost as per FBSM mechanism will increase the overall average power purchase cost which is computed considering both Fixed and Variable Charges, thereby burdening the consumers with FAC. Further, due to historical issues of delay in computing imbalance pool quantum and cost of power, for which appropriate orders are already passed by the Commission, non-consideration of surplus imbalance pool quantum at the time of FAC computation on monthly basis will not have any adverse impact on licensee as it would have anyway paid the entire fixed cost to the generator even if lower quantum of power was supplied. Further, for FAC computation total energy purchased by the licensee is being considered for FAC Computation. In view of the aforesaid, it would not be prudent to burden the consumers by considering the impact of monthly surplus imbalance pool in FAC computation. Accordingly, to balance the overall interest of consumers and licensee, the Commission has not considered the surplus imbalance pool quantum and cost in the monthly FAC computation as it will get adjusted during truing-up of the respective year.
- 5.14. The Commission has noted that MBPPL has followed Merit Order Dispatch for scheduling of power and all sources are scheduled according to SLDC instructions.
- 5.15. Approved Cost: The Commission has noted that MBPPL could not procure the approved quantum of power from its approved sources to the full capacity due to lower demand due to continuation of impact of COVID-19 which has resulted in lower power purchase cost and increased Average power purchase cost for the month of April 2021 to June 2021. This increase has been on account of increase in burden of fixed cost due to the procurement of power from its existing PPA with JPL and GMRETL and also procurement of power from Solar and Non Solar renewable power for the month of May and June 2021 in order to mee RPO shortfall due to stay in REC trading. Therefore, actual APPC works out to be higher than the approved APPC in MYT order for the month of April 2021 to June 2021.
- 5.16. The details of the overall cost approved and actual for the month of April to June, 2021 as per MYT Order is as shown in the Table 2Error! Reference source not found. below:



Table 2: Approved and Actual Power Purchase Cost for MBPPL

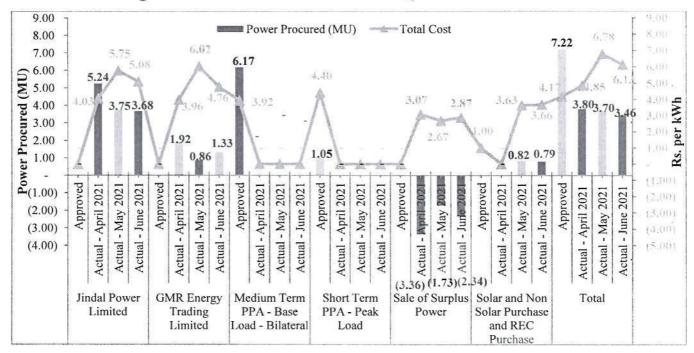
Source		Power Procur ed (MU)	Fixed Cost (Rs. Crore)	Fixed Cost (Rs./kWh)	Variab le Cost (Rs. Crore)	Varia ble Cost (Rs./k Wh)	Total Cost (Rs. Crore	Total Cost (Rs./k Wh)
	Approved	-	-	-	_	(N)	_	_
Jindal Power	Actual - April 2021	5.24	0.87	1.66	1.24	2.37	2.11	4.03
Limited	Actual - May 2021	3.75	0.90	2.39	1.26	3.36	2.16	5.75
	Actual - June 2021	3.68	0.87	2.36	1.00	2.71	1.87	5.08
	Approved	1997	=	=	-	-	=	-
GMR Energy	Actual - April 2021	1.92	0.43	2.22	0.33	1.74	0.76	3.96
Trading Limited	Actual - May 2021	0.86	0.37	4.28	0.15	1.74	0.52	6.02
1.5	Actual - June 2021	1.33	0.40	3.02	0.23	1.74	0.63	4.76
	Approved	6.17			2.42	3.92	2.42	3.92
Medium Term PPA - Base	Actual - April 2021	-	0.001	*	-	3	0.001	_
Load - Bilateral	Actual - May 2021	-	0.001	=	-	-	0.001	-
14	Actual - June 2021	_	0.001	¥	-		0.001	-
	Approved	1.05			0.46	4.40	0.46	4.40
Short Term	Actual - April 2021	-	=	=	_	<u>=</u>	_	_
PPA - Peak Load	Actual - May 2021	-	-	-	-	_	_	-
	Actual - June 2021	-	=	-	_	-	_	0 -
	Approved	-			-	-	-	-
Sale of	Actual - April 2021	(3.36)			(1.03)	3.07	(1.03)	3.07
Surplus Power	Actual - May 2021	(1.73)			(0.46)	2.67	(0.46)	2.67
	Actual - June 2021	(2.34)			(0.67)	2.87	(0.67)	2.87
Solar and Non Solar Purchase and REC Purchase	Approved				0.13	1.00	0.13	1.00
	Actual - April 2021	-	-	-	S= 1		≅	3.7
	Actual - May 2021	0.82	-	-	0.30	3.63	0.30	3.63
	Actual - June 2021	0.79	-	•	0.29	3.66	0.29	3.66
Total	Approved	7.22			3.01	4.17	3.01	4.17
·	Actual - April 2021	3.80	1.30	3.41	0.55	1.44	1.84	4.85



Actual - May 2021	3.70	1.27	3.42	1.25	3.37	2.51	6.78
Actual - June 2021	3.46	1.27	3.68	0.85	2.45	2.12	6.13

5.17. The variation in approved and actual quantum of power procured and the APPC is shown the graph below:

Figure 1: Variation in Power Procurement Quantum and APPC



5.18. Reasons for the rate variation for various sources are as shown below:

Table 3: Reasons for Rate Variation for various Sources

Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
1	JPL	April	-	4.03	Fixed cost burden has
	×	May		5.75	increased due to the
		June		5.08	procurement of power from its existing PPA with JPL as the PPA was till 30 June, 2021. CTU invoices for Oct'20 to Dec'20 have also increased cost of May month.
2	GMRETL	April	antifica.	3.96	Fixed cost burden has
		May	S Proposition	6.02	increased due to the

Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation
12		June		4.76	procurement of power from its existing PPA with GMRETL as the PPA was till 30 June, 2021.
4	Sale of Surplus	April	-	3.07	As the Medium-Term PPA
	Power	May	1	2.67	with JPL for meeting the
		June		2.87	Base Load demand and GMRETL to meet the Peak load PPA expired on 30 June, 2021, MBPPL has procured power from its existing sources. The surplus power available from JPL was sold to GEPL at Rs 2.65/kWh To optimise the power purchase cost, the power from GMRETL was sold directly on IEX whenever the price on IEX was higher than the Fuel and Generation Cost/POC injection charges as per PPA. The cut-off price for bidding on IEX was Rs 2.07/kWh so that MBPPL is cost neutral and there is no additional burden on consumers. Accordingly, the power was sold on IEX at Rs 3.38/kWh, Rs 2.70/kWh and Rs 3.05/kWh during the month of April
					2021, May 2021 and June 2021, respectively.
3	Solar and Non Solar Purchase and	April May	1.00	3.63	The Commission has approved the rate for RPO



Sr. No.	Source	Month	Approved Rate (Rs. /kWh)	Actual Rate (Rs. /kWh)	Reason for rate variation			
	REC Purchase	June		3.66	compliance considering that MBPPL shall meet the requirement through procurement of RECs. Due to stay on REC trading by APTEL, MBPPL has procured green energy from G-TAM market on IEX platform. Therefore, the net rate for procurement of Power for RPO fulfilment varies from the rate approved by the Commission.			
4	Base Load - Medium Term			-	MBPPL has procured power			
		May	3.92	-	from its existing PPA.			
	Sources - Bilateral	June		9				
5	Short-Term PPA	April	4.40				1/2	MBPPL has procured power
	Peak Load	May		II E	from its existing PPA.			
		June		3 2				
6	Total	April		4.85*	April: Higher per unit fixed			
		May		6.78*	cost due to lower purchase			
		June	4.17	6.13*	May: Higher per unit fixed cost due to lower purchase, purchase of solar energy, CTU invoices for Oct'20 to Dec'20, sale of energy at lower rate as compared to April June: Higher per unit fixed cost due to lower purchase, purchase of solar energy, sale of energy at lower rate as compared to April			

^{*} actual total power purchase rate is higher than any of the power purchase source due to sale of energy at rate higher than variable rate but lower than total rate (variable rate + fixed rate).

5.19. Considering the above, the Commission allows the average power purchase cost of Rs. 4.85 / kWh, Rs. 6.78 / kWh and Rs. 6.13 / kWh for the months of April, May and June, 2021 respectively as shown in Table 3 above. The variation in power purchase cost is mainly on account of increase in burden of Fixed Cost due to the procurement of power from its existing PPA with JPL and GMRETL and also procurement of

Page 13 of 19

power from Solar and Non Solar renewable power for the month of May and June 2021 in order to mee RPO shortfall due to stay in REC trading and decrease in variable cost due to impact of sale of surplus power.

6. FAC on account of fuel and power purchase cost (F)

- 6.1. The Commission has worked out the average power purchase costs for the months as shown in Table 2 above. The same has been compared with the average power purchase cost approved by the Commission in MYT Order dated 30 March, 2020 and arrived at differential per unit rate at which Z_{FAC} is to be passed on to the consumers.
- 6.2. Thus, the following Table 4 shows the rectified ZFAC worked out by the Commission on account of difference in fuel and power purchase cost for the month of April to June, 2021.

S. No. **Particulars** Units Apr-21 May-21 Jun-21 Average power purchase cost approved by the . 1 Rs./kWh 4.17 4.17 4.17 Commission 2 Actual average power purchase cost Rs./kWh 4.85 6.78 6.13 Change in average power purchase cost (=2 -3 Rs./kWh 0.68 2.61 1.96 1) 4 Net Power Purchase MU 3.80 3.70 3.46 Change in fuel and power purchase cost Rs. 5 0.26 0.97 0.68 $(=3 \times 4/10)$ Crore

Table 4: FAC on account of Fuel and Power Purchase Cost

7. Adjustment for over recovery/under recovery (B)

7.1. The adjustment factor for over recovery / under recovery (B) is as shown in the Table 5 below:

Table 5 Adj	ustment i	for over	recovery/	under	recovery

S. No.	Particulars	Units	Apr-21	May-21	Jun-21
1.1	Incremental cost allowed to be recoverd in Month n-4	Rs. Crore	0.28	0.34	0.33
1.2	Incremental cost in Month n-4 actually recovered in month n-2	Rs. Crore	0.34	0.32	0.31
1.3	(over-recovery)/under-recovery (=1.2 - 1.1)	Rs. Crore	(0.06)	0.02	0.01
2.0	Carried forward adjustment for over- recovery/under-recovery attributable to application of ceiling limit for previous month	Rs. Crore	0.15	0.01	0.67



3.0	Adjustment factor for over-recovery/under-recovery (1.3+2.0)	Rs. Crore	0.08	0.04	0.68
-----	--	-----------	------	------	------

8. Carrying Cost for over recovery/under recovery (C)

- 8.1. Carrying/Holding Cost for under recovery/over recovery has been granted at the approved interest rate for the eligible amount which works out to **Rs. 0.0006 Crore, 0.0002 Crore and Rs. 0.0048 Crore** for the month of April 2021, May 2021 and June 2021.
- 8.2. Holding cost for the month of April to June, 2021 is calculated by considering MCLR + 150 basis points which turns out to be 8.50%.
- 8.3. The Commission has computed the holding cost towards the amount over recovered in the month of April to June, 2021 which is as shown in the Table 6 below:

Table 6 Carrying/Holding Cost for over/under recovery

Particulars	Units	Apr-21	May-21	Jun-21
Adjustment factor for over-recovery/under-recovery	Rs. Crore	0.08	0.04	0.68
Interest rate	%	8.50%	8.50%	8.50%
Carrying cost for over-recovery/under- recovery	Rs. Crore	0.0006	0.0002	0.0048

9. Disallowance due to excess Distribution Loss

9.1. Regulation 10.8 of MYT Regulations, 2019 provides for FAC amount to be reduced in case the actual distribution loss for the month exceeds the approved distribution loss. The relevant extract is reproduced as follows.

"10.8 The total Z_{FAC} recoverable as per the formula specified above shall be recovered from the actual sales in terms of "Rupees per kilowatt-hour":

Provided that, in case of unmetered consumers, the Z_{FAC} shall be recoverable based on estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

Provided further that, where the actual annual sliding distribution losses of the Distribution Licensee exceed the level approved by the Commission, the amount of Z_{FAC} corresponding to the excess distribution losses (in kWh terms) shall be deducted from the total Z_{FAC} recoverable"

9.2. The following Table 7 provides the comparison of approved and actual distribution loss and disallowance due to excess distribution loss:

Table 7: Disallowance of FAC due to excess distribution loss

S. No.	Particulars	Units	Approved in Tariff Order	Apr-21	May-21	Jun-21
1	Net Energy input at Distribution Voltages	MU	6.99	3.65	3.50	3.30
2	Energy sales at Distribution voltages	MU	6.92	3.57	3.42	3.23
3	Distribution Loss (1 - 2)	MU	0.07	0.08	0.08	0.07
4	Distribution Loss as % (3/1)	%	0.97%	2.13%	2.26%	2.05%
5	Annual Sliding Distribution Loss	%		1.78%	1.83%	1.89%
6	Excess Distribution Loss = [Annual Sliding Distribution Loss (4) - Distribution loss approved] x Net Energy Input (1)	MU	-	0.03	0.04	0.04
7	Disallowance of FAC due to excess Distribution Loss	Rs. Crore	-	0.003	0.012	0.016

- 9.3. As seen from the above Table 7, annual sliding distribution loss for the months of April to June, 2021 is higher than the MYT approved distribution loss of 0.97%.
- 9.4. The Commission observed that MBPPL has worked out disallowance of FAC due to excess Distribution Loss based on the Distribution Loss corresponding to the standalone energy input at distribution voltage for the month of April to June, 2021. The Commission considers the same for disallowance of FAC due to excess distribution loss.

10. Summary of Allowable ZFAC

10.1. The summary of the FAC amount as approved by the Commission for the month of April to June, 2021 is as shown in the Table 8 below.

Table 8: Summary of Allowable ZFAC

Sr. No.	Particulars	Units	Apr-21	May-21	Jun-21
1	Calculation of ZFAC				
1.1	Change in cost of generation and power purchase attributable to Sales within the License Area (F)	Rs. Crore	0.260	0.968	0.677



1.2	Carrying cost for over-recovery/under-recovery (C)	Rs. Crore	0.001	0.0002	0.005
1.3	Adjustment factor for over-recovery/under-recovery (B)	Rs. Crore	0.085	0.036	0.683
1.4	ZFAC = F+C+B	Rs. Crore	0.345	1.005	1.365
2	Calculation of FAC Charge				
2.1	Energy Sales within the License Area	MU	3.572	3.417	3.229
2.2	Excess Distribution Loss	MU	0.030	0.043	0.039
2.3	ZFAC per kWh	Rs./kWh	0.958	2.904	4.176
3.0	Allowable FAC				
3.1	FAC disallowed corresponding to excess Distribution Loss [(2.2 x 2.3)/10]	Rs. Crore	0.003	0.012	0.016
3.2	FAC allowable [1.4-3.1]	Rs. Crore	0.342	0.993	1.349
4.0	Utilization of FAC Fund				
4.1	Opening Balance of FAC Fund	Rs. Crore	-	-	=
4.2	ZFAC for the month (Sr. N. 3.2)	Rs. Crore	0.342	0.993	1.349
4.3	Closing Balance of FAC Fund	Rs. Crore	-	1.0	=
4.4	ZFAC leviable/refundable to consumer	Rs. Crore	0.342	0.993	1.349
5.0	Total FAC based on category wise and slab wise allowed to be recovered in the billing month of April 2021 for Feb 2021, May 2021 for Mar 2021 and June 2021 for Apr 2021	Rs. Crore	0.327	0.323	0.305
6.0	Carried forward FAC for recovery during future period (4.4-5.0)	Rs. Crore	0.015	0.669	1.043

- 10.2. It can be seen from the above Table 8 that the standalone FAC for the month of April 2021, May 2021 and June 2021 is Rs. 0.342 Crore, Rs. 0.993 Crore and Rs. 1.349 Crore respectively. Based on energy sales and excess distribution loss, FAC per unit has been worked out as Rs. 0.95 per kWh, Rs. 2.90 per kWh and Rs. 4.17 per kWh for the months of April 2021, May 2021 and June 2021 respectively as shown above.
- 10.3. Further, the Regulation 10.9 of MYT Regulations, 2019 specifies as:

Provided that the monthly ZFAC shall not exceed 20% of the variable component of Tariff or such other ceiling as may be stipulated by the Commission from time to time:

10.4. As the FAC per unit computed in the month of April 2021, May 2021 and June 2021 as shown in Table 8 above is higher than the 20% cap specified in MYT Regulations, 2019, hence, there is restriction triggered with regards to such ceiling.



10.5. Further, due to ceiling limit, the FAC recoverable has been worked out as Rs. 0.327 Crore, Rs. 0.323 Crore and Rs. 0.305 Crore for the month of April to June 2021 respectively. Thus, FAC equivalent Rs. 0.015 Crore (i.e., Rs. 0.342 Crore minus Rs. 0.327 Crore) for the month of April 2021, Rs. 0.669 Crore (i.e., Rs. 0.993 Crore minus Rs. 0.323 Crore) for the month of May 2021 and Rs. 1.043 Crore (i.e Rs. 1.349 Crore minus Rs. 0.305 Crore) for the month of June 2021 has remained unrecovered. Accordingly, the Commission allows the recovery of Rs. 1.043 Crore as carried forward FAC to be recovered in future period.

11. Recovery from Consumers:

11.1. Regulation 10.9 of MERC MYT Regulations, 2019 provides for methodology of recovery of FAC charge from each category of consumers. The relevant extract is reproduced as below.

"10.9 The Z_{FAC} per kWh for a particular Tariff category/sub-category/consumption slab shall be computed as per the following formula: —

 Z_{FAC} Cat $(Rs/kWh) = [Z_{FAC} / (Metered sales + Unmetered consumption estimates + Excess distribution losses)] * <math>k * 10$, Where:

 Z_{FAC} Cat = Z_{FAC} component for a particular Tariff category/sub-category/consumption slab in 'Rupees per kWh' terms;

k = Average Billing Rate / ACOS;

Average Billing Rate = Average Billing Rate for a particular Tariff category/sub-category/consumption slab under consideration in 'Rupees per kWh' as approved by the Commission in the Tariff Order:

Provided that the Average Billing Rate for the unmetered consumers shall be based on the estimated sales to such consumers, computed in accordance with such methodology as may be stipulated by the Commission:

ACOS = Average Cost of Supply in 'Rupees per kWh' as approved for recovery by the Commission in the Tariff Order:

Provided that the monthly Z_{FAC} shall not exceed 20% of the variable component of Tariff or such other ceiling as may be stipulated by the Commission from time to time:

Provided further that any under-recovery in the Z_{FAC} on account of such ceiling shall be carried forward and shall be recovered by the Distribution Licensee over such future period as may be directed by the Commission..."



- 11.2. The Commission has worked out FAC per unit for each category of consumer based on the formula provided in the above Regulations.
- 11.3. The following Table 9Error! Reference source not found. shows per unit Z_{FAC} for the month of April, May and June, 2021 to be levied on consumers of MBPPL in the billing month of June 2021, July 2021 and August 2021.

Table 9 Category wise FAC Revenue for billing month of June 2021, July 2021 and August 2021

Sr. No	Consumer Category	Slabs	Z _{FAC} computed for the month of April 2021 (Rs. Crore)	Z _{FAC} computed for the month of May 2021 (Rs. Crore)	Z _{FAC} computed for the month of June 2021 (Rs. Crore)
	HT Category				
1	HT- I Industrial	all units	0.27	0.26	0.25
2	HT-II Commercial	all units	-	-	=
	LT Category				
3	LT-II(A) Commercial (0-20 kW)	all units	0.001	0.001	0.001
4	LT-II (B) Commercial (above 20 kW)	all units	0.002	0.002	0.001
5	LT-III (A) Industrial (0-20 kW)	all units	0.004	0.004	0.004
6	LT-III (B) Industrial (above 20 kW)	all units	0.05	0.06	0.052
	Total		0.33	0.32	0.31